

**SEQUENCE LISTING**

<110> Meyers, Rachel  
Hunter, John Joseph

<120> 62112, A NOVEL HUMAN DEHYDROGENASE AND  
USES THEREOF

<130> MNI-187

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<151> 2000-08-31

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Met Ser Gly Leu Phe Leu Arg Thr Thr Ala Ala Ala
   1          5          10

cgt gcc tgc cgg ggt ctg gtg gtc tct acc gcg aac cgg cgg cta ctg 156
Arg Ala Cys Arg Gly Leu Val Val Ser Thr Ala Asn Arg Arg Leu Leu
 15           20           25           30

cgc acc agc ccg cct gta cga gct ttc gcc aaa gag ctt ttc cta ggc 204
Arg Thr Ser Pro Pro Val Arg Ala Phe Ala Lys Glu Leu Phe Leu Gly
 35           40           45

aaa atc aag aag aaa gaa gtt ttc cca ttt cca gaa gtt agc caa gat 252
Lys Ile Lys Lys Lys Glu Val Phe Pro Phe Pro Glu Val Ser Gln Asp
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Glu Leu Asn Glu Ile Asn Gln Phe Leu Gly Pro Val Glu Lys Phe Phe
          65           70           75

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80 85 90

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Asp Glu Thr Leu Glu Lys Leu Lys Ser Leu Gly Leu Phe Gly Leu Gln
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gag gag cag aaa gcc aaa tac ttg cct aaa ctg gcg tcc ggg gag cac Glu Glu Gln Lys Ala Lys Tyr Leu Pro Lys Leu Ala Ser Gly Glu His 160 165 170	588
att gca gcc ttc tgc ctc acg gag cca gcc agt ggg agc gat gca gcc Ile Ala Ala Phe Cys Leu Thr Glu Pro Ala Ser Gly Ser Asp Ala Ala 175 180 185 190	636
tca atc cgg agc aga gcc aca cta agt gaa gac aag aag cac tac atc Ser Ile Arg Ser Arg Ala Thr Leu Ser Glu Asp Lys Lys His Tyr Ile 195 200 205	684
ctc aat ggc tcc aag gtc tgg att act aat gga gga ctg gcc aat att Leu Asn Gly Ser Lys Val Trp Ile Thr Asn Gly Gly Leu Ala Asn Ile 210 215 220	732
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Lys Val Phe Ser Ser Glu Ala Ala Trp Gln Cys Val Ser Glu Ala Leu		
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Ile Leu Arg Asp Thr Arg Ile Leu Leu Ile Phe Glu Gly Thr Asn Glu		
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Arg Asn His Asp His Glu Val Leu Leu Ala Asn Thr Phe Cys Val Glu		
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gct tac ttg cag aat ctc ttc agc ctc tct cag ctg gac aag tat gct	1836	
Ala Tyr Leu Gln Asn Leu Phe Ser Leu Ser Gln Leu Asp Lys Tyr Ala		
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590		
cca gaa aac cta gat gag cag att aag aaa gtg tcc cag cag atc ctt	1884	
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610

615

620

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D	Ser	Pro	Pro	Val	Arg	Ala	Phe	Ala	Lys	Glu	Leu	Phe	Leu	Gly	Lys	Ile
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F	Asn	Glu	Ile	Asn	Gln	Phe	Leu	Gly	Pro	Val	Glu	Lys	Phe	Phe	Thr	Glu
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G	Glu	Val	Asp	Ser	Arg	Lys	Ile	Asp	Gln	Glu	Gly	Lys	Ile	Pro	Asp	Glu
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H	Thr	Leu	Glu	Lys	Leu	Lys	Ser	Leu	Gly	Leu	Phe	Gly	Leu	Gln	Val	Pro
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I	Glu	Glu	Tyr	Gly	Gly	Leu	Gly	Phe	Ser	Asn	Thr	Met	Tyr	Ser	Arg	Leu
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J	Gly	Glu	Ile	Ile	Ser	Met	Asp	Gly	Ser	Ile	Thr	Val	Thr	Leu	Ala	Ala
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K	His	Gln	Ala	Ile	Gly	Leu	Lys	Gly	Ile	Ile	Leu	Ala	Gly	Thr	Glu	Glu
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L	Gln	Lys	Ala	Lys	Tyr	Leu	Pro	Lys	Leu	Ala	Ser	Gly	Glu	His	Ile	Ala
									165		170			175		
M	Ala	Phe	Cys	Leu	Thr	Glu	Pro	Ala	Ser	Gly	Ser	Asp	Ala	Ala	Ser	Ile
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U	Phe	Ser	Met	Gly	Ser	Val	Val	Ala	Gly	Leu	Leu	Lys	Arg	Ile	Glu	
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V	Met	Thr	Ala	Glu	Tyr	Ala	Cys	Thr	Arg	Lys	Gln	Phe	Asn	Lys	Arg	Leu
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Arg	Met	Tyr	Ile	Ala	Leu	Thr	Gly	Leu	Gln	His	Ala	Gly	Arg	Ile	Leu
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Leu	Gly	Leu	Thr	Gly	Asn	His	Gly	Val	Val	His	Pro	Ser	Leu	Ala	Asp
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Ala	Val	Leu	Ser	Arg	Ala	Ser	Arg	Ser	Ile	Arg	Ile	Gly	Leu	Arg	Asn
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His	Asp	His	Glu	Val	Leu	Leu	Ala	Asn	Thr	Phe	Cys	Val	Glu	Ala	Tyr
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Leu	Gln	Asn	Leu	Phe	Ser	Leu	Ser	Gln	Leu	Asp	Lys	Tyr	Ala	Pro	Glu
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Asn	Leu	Asp	Glu	Gln	Ile	Lys	Lys	Val	Ser	Gln	Gln	Ile	Leu	Glu	Lys
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1					5				10				15		
tgc	cgg	ggt	ctg	gtg	gtc	tct	acc	gcg	aac	cgg	cgg	cta	ctg	cgc	acc
Cys	Arg	Gly	Leu	Val	Val	Ser	Thr	Ala	Asn	Arg	Arg	Leu	Leu	Arg	Thr
20					25							30			
agc	ccg	cct	gta	cga	gct	ttc	gcc	aaa	gag	ctt	ttc	cta	ggc	aaa	atc
Ser	Pro	Pro	Val	Arg	Ala	Phe	Ala	Lys	Glu	Leu	Phe	Leu	Gly	Lys	Ile
35					40							45			
aag	aag	aaa	gaa	gtt	ttc	cca	ttt	cca	gaa	gtt	agc	caa	gat	gaa	ctt
Lys	Lys	Lys	Glu	Val	Phe	Pro	Phe	Pro	Glu	Val	Ser	Gln	Asp	Glu	Leu
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act ttg gag aaa ttg aag agc cta ggg ctt ttt ggg ctg caa gtc cca Thr Leu Glu Lys Leu Lys Ser Leu Gly Leu Phe Gly Leu Gln Val Pro 100 105 110			336
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ggg gag atc atc agc atg gat ggg tcc atc act gtg acc ctg gca gcg Gly Glu Ile Ile Ser Met Asp Gly Ser Ile Thr Val Thr Leu Ala Ala 130 135 140			432
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gcc ttc tgc ctc acg gag cca gcc agt ggg agc gat gca gcc tca atc Ala Phe Cys Leu Thr Glu Pro Ala Ser Gly Ser Asp Ala Ala Ser Ile 180 185 190			576
cgg agc aga gcc aca cta agt gaa gac aag cac tac atc ctc aat Arg Ser Arg Ala Thr Leu Ser Glu Asp Lys Lys His Tyr Ile Leu Asn 195 200 205			624
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act acc agg atc cat gag ctt aaa cag gcc aaa gtg agc aca gtc atg Thr Thr Arg Ile His Glu Leu Lys Gln Ala Lys Val Ser Thr Val Met 450 455 460	1392
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His Asp His Glu Val Leu Leu Ala Asn Thr Phe Cys Val Glu Ala Tyr		
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Asn Leu Asp Glu Gln Ile Lys Lys Val Ser Gln Gln Ile Leu Glu Lys		
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Arg Ala Tyr Ile Cys Ala His Pro Leu Asp Arg Thr Cys		
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